

## FORM 3

# APPLICATION FOR PERMIT TO DRILL

6. SURFACE:  
State

7. IF INDIAN, ALLOTTEE OR TRIBE NAME:

8. UNIT or CA AGREEMENT NAME:

9. WELL NAME and NUMBER:  
Buck Camp 11-22-24-36

10. FIELD AND POOL, OR WILDCAT:  
Undesignated

11. QTR/QTR, SECTION, TOWNSHIP, RANGE,  
MERIDIAN:

SESW 36 11S 22E S

13. STATE: UTAH

## Uintah

17. NUMBER OF ACRES ASSIGNED TO THIS WELL:

40 acres

20. BOND DESCRIPTION:

RLB0008031

23. ESTIMATED DURATION:

20 days

## 24.

25. ATTACHMENTS

☒ COMPLETE DRILLING PLAN

☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

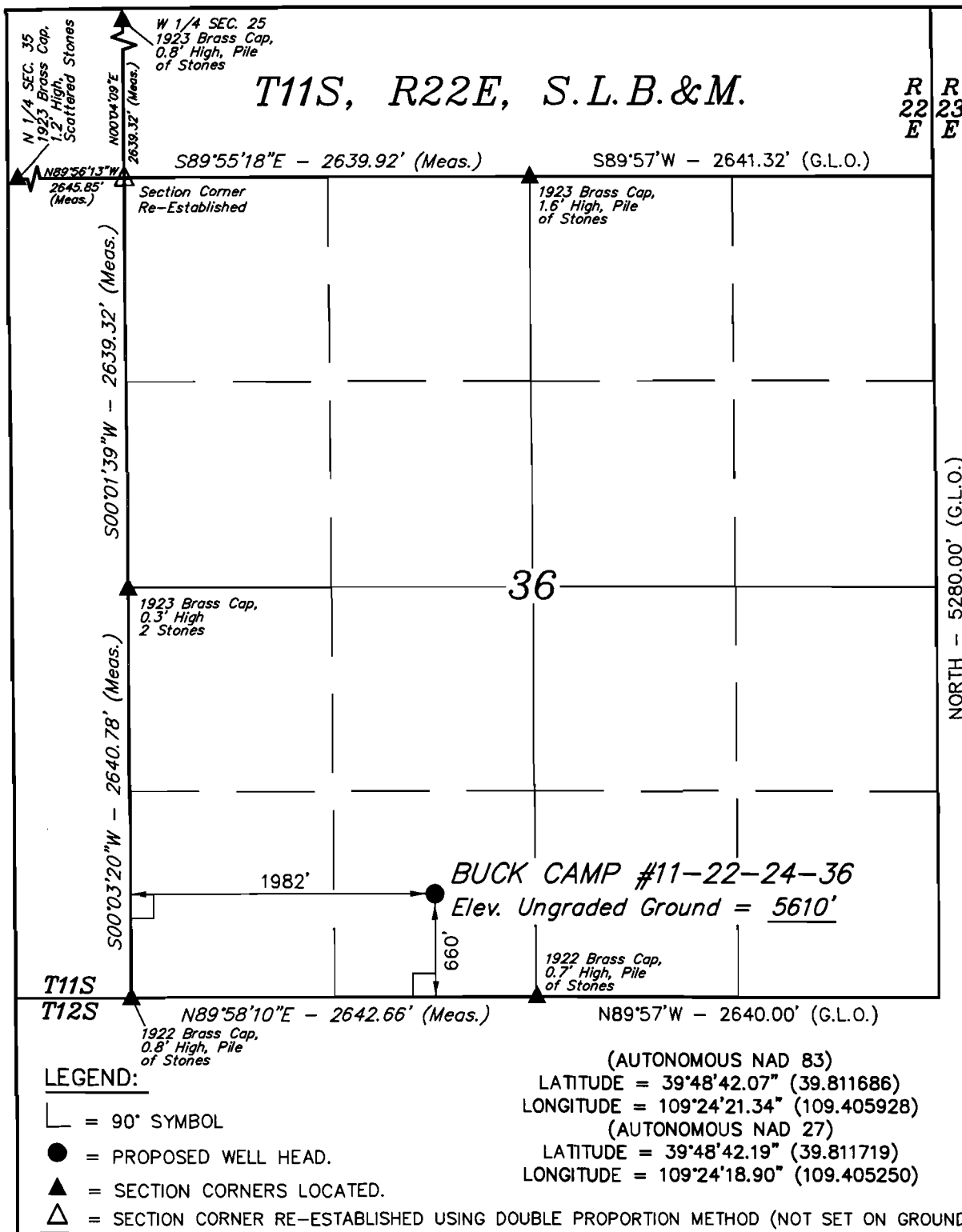
**TITLE** Landman - Regulatory Specialist

DATE 2/28/2006

RECEIVED  
MAR 02 2006

APPROVAL:

DIV. OF OIL, GAS & MINING



## ENDURING RESOURCES, LLC.

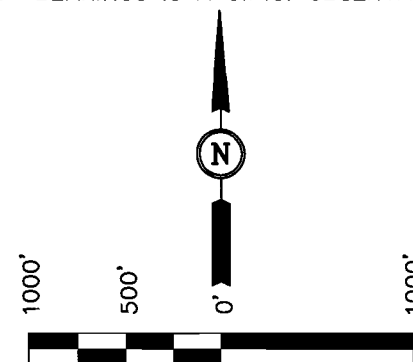
Well location, BUCK CAMP #11-22-24-36,  
located as shown in the SE 1/4 SW 1/4 of  
Section 36, T11S, R22E, S.L.B.&M. Uintah  
County, Utah.

### BASIS OF ELEVATION

BENCH MARK 87 EAM LOCATED IN THE SW 1/4 OF SECTION 1,  
T12S, R23E, S.L.B.&M. TAKEN FROM THE ARCHY BENCH  
SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES  
(TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES  
DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID  
ELEVATION IS MARKED AS BEING 5887 FEET.

### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF

*Robert H. Kay*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

**UINTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 12-23-05	DATE DRAWN: 01-04-06
PARTY T.A. J.H. L.K.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE ENDURING RESOURCES, LLC	

**ENDURING RESOURCES, LLC**

425 Seventeenth Street, Suite 1500

Denver, Colorado 80202

Telephone: 303-573-1222

Facsimile: 303-573-0461

February 28, 2006

State of Utah  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt lake City, Utah 84114-5801

Attention: Diana Whitney

**RE: Buck Camp 11-22-24-36  
660' FSL – 1,982' FWL  
SESW Sec. 36-T11S-R22E  
Uintah County, Utah**

Dear Ms. Whitney

Attached are two original applications to drill for the above-referenced proposed well. ***This well will be drilled on State of Utah lands.*** A copy of this APD is being sent to SITLA. Access into this section is using an existing oil and gas well road.

Enduring Resources, LLC respectfully requests that this information, and future information, be held confidential.

Should you have any questions concerning this matter, please do not hesitate to call (303-350-5114)

Very truly yours

**ENDURING RESOURCES, LLC**



Alvin R. (Al) Arlian  
Landman – Regulatory Specialist

ara/  
Attachments as stated:

cc: SITLA

RECEIVED  
MAR 02 2006  
DIV. OF OIL, GAS & MINING

## Enduring Resources, LLC

Buck Camp 11-22-24-36  
660' FSL – 1,982' FWL  
SESW Sec. 36-T11S-R22E  
Uintah County, Utah

Lease #: ML-47077

### ONSHORE ORDER 1 - DRILLING PLAN

1. **Estimated Tops of Geological Markers:**

Formation	Depth (K.B.)
Uinta	Surface
Green River	191'
Wasatch	2641'
Mesaverde	4756'

2. **Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals:**

Substance	Formation	Depth (K.B.) TVD
	KB-Uinta Elevation: 5623' est.	
Oil / Gas	Green River	379'
Oil /Gas	Wasatch	2829'
Oil /Gas	Mesaverde	4919'
	TD	7260'

An 11" hole will be drilled to approximately 2000 feet. The depth will be determined by the depth that the Birds Nest zone is encountered. The hole will be drilled 400 feet beyond the top of the Birds Nest zone and surface casing will be set.

3. **Pressure Control Equipment: (3000 psi schematic attached)**

- A. Type: Eleven (11) inch double gate hydraulic BOP with eleven (11) inch annular preventer on 3,000 psi casinghead, with 3,000 psi choke manifold equipped per the attached diagram. BOPE as specified in *Onshore Oil & Gas Order Number 2*. A PVT, stroke counter and flow sensor will be installed to check for flow and monitor pit volume.
- B. Pressure Rating: 3,000 psi BOPE
- C. Kelly will be equipped with upper and lower Kelly valves.
- D. Testing Procedure: Annular Preventer

At a minimum, the annular preventer will be pressure tested to 50% of the stack rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the annular preventer will be functionally operated at least weekly.

#### Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

#### E. Miscellaneous Information:

The blowout preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2*.

#### 4. Proposed Casing & Cementing Program:

##### A. Casing Program: All New

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Depth Set (MD)
20"	14" O.D.				40' (GL)
11"	8-5/8"	24#	J-55	ST&C	0 – 2,016' (KB) est.
7-7/8"	4-1/2"	11.6#	N-80	LT&C	0 – 7,260' (KB)

The surface casing will have guide shoe, 1 joint, insert float collar. Centralize the shoe joint with bowspring centralizers in the middle and top of the joint and the next 16 joints with bowspring centralizers on every other collar (8 centralizers total). Thread lock guide shoe.

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to drilling out from under the casing shoe.

#### B. Casing Design Parameters:

Depth (MD)	Casing	Collapse(psi)/SF	Burst (psi)/SF	Tension(mlbs)/SF
40' (GL)	14" OD			
2016' (KB)	8-5/8", 24#/ft, J55, STC	1370/1.52(a)	2950/3.28(b)	244/5.81(c)
7260' (KB)	4-1/2", 11.6#/ft, N-80, LTC	6350/1.68 (d)	7780/2.24(e)	223/3.08 (f)

- (a.) based on full evacuation of pipe with 8.6 ppg fluid on annulus
- (b.) based on 8.6 ppg gradient with no fluid on annulus
- (c.) based on casing string weight in 8.6 ppg mud
- (d.) based on full evacuation of pipe with 10.0 ppg fluid on annulus
- (e.) based on 9.2 ppg gradient, gas to surface, with no fluid on annulus, no gas gradient
- (f.) based on casing string weight in 9.2 ppg mud

#### PROPOSED CEMENTING PROGRAM

##### Surface Casing (if well will circulate)-Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft <sup>3</sup> /sx)
8-5/8"	Lead	1516	Premium cement + 16% gel + 0.25 pps celloflake	138	25%	11.1	3.50
8-5/8"	Tail	500	Premium cement + 2% CaCl <sub>2</sub> + 0.25 pps celloflake	138	25%	15.8	1.15

A cement top job is required if cement fallback is greater than 10' below ground level. Top job (weight 15.8 ppg, yield 1.15 ft<sup>3</sup>/sx) cement will be premium cement w/ 3% CaCl<sub>2</sub> + 0.25 pps celloflake. Volume as required

##### Surface Casing (if well will not circulate) - Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft <sup>3</sup> /sx)
8-5/8"	Lead	500	Premium cement + 2% CaCl <sub>2</sub> + 0.25 pps celloflake	138	25	15.8	1.15
8-5/8"	Top job	As req.	Premium cement + 3% CaCl <sub>2</sub> + 0.25 pps celloflake	As Req.		15.8	1.15

**Production Casing and Liner** - Cemented TD to 300' above base of surface casing

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft <sup>3</sup> /sx)
4-1/2"	Lead	713	Class "G" + 5% NaCl + 12% Gel + 0.25 pps celloflake + 0.2% antifoam + 0.25% fluid loss + 1% extender	64	25	11.0	3.3
4-1/2"	Tail	4831	50/50 POZ Class G + 2% gel + 1% CaCl <sub>2</sub> + 0.2% dispersant + 0.2% fluid loss + 0.1% antifoam	882	25	14.3	1.56

Cement volumes for the 4-1/2" Production Casing will be calculated to provide a top of cement to 300' above base of surface casing. Cement volumes are approximate and were calculated under the assumption that a gauge hole will be achieved. Actual cement volumes may vary due to variations in the actual hole size and will be determined by running a caliper log on the drilled hole. Actual cement types may vary due to hole conditions and cement contractor used.

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. **Drilling Fluids (mud) Program:**

Interval (MD)	Mud Weight	Fluid Loss	Viscosity	Mud Type
0' – 2016' (KB)		No cntrl		Air/mist
2000'-3000' (KB)	8.4-8.6	No cntrl	28-36	Water
3000'-7260' (KB)	8.8-9.8	8 - 10 ml	32-42	Water/Gel

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

6. **Evaluation Program:**

Tests: No tests are currently planned.

Coring: No cores are currently planned.

Samples: No sampling is currently planned.

Logging

- Dual Induction – SFL /Gamma Ray/Caliper/SP/TDLT/CNL/ML  
TD to Base Surface Casing
- Cement Bond Log / Gamma Ray:  
TD to Base of Surface Casing or Top of Cement if below Base of Surface Casing

Stimulation: A stimulation or frac treatment will be designed for completion of this well based on openhole log analysis. The drill site, as approved, will be sufficient size to accommodate all completion activities.

**7. Abnormal Conditions:**

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered or known to exist from previous wells drilled to similar depths in the general area.

Maximum anticipated bottom hole pressure equals approximately 3,775 psi (calculated at 0.52 psi/foot of hole) and maximum anticipated surface pressure equals approximately 2,178 psi (anticipated bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

**8. Anticipated Starting Dates:**

- Anticipated Commencement Date- Within one year of APD issue.
- Drilling Days- Approximately 10 days
- Completion Days - Approximately 10 days
- Anticipate location construction within 30 days of permit issue.

**9. Variances:**

None anticipated

**10. Other:**

A Cultural Resource Inventory and Paleontology reconnaissance shall be conducted for the well location, access route and pipeline. The reports shall be submitted to the Division of Oil, Gas and Mining and the School and Institutional Trust lands Administration upon their receipt.

Single Shot directional surveys will be dropped every 2000 feet to monitor hole angle.



ENDURING RESOURCES, LLC.  
BUCK CAMP #11-22-24-36  
SECTION 36, T11S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 11.2 MILES ALONG THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHEASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 6.0 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #11-22-21-36 & 11-22-22D-36 TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY, THEN SOUTHEASTERLY, THEN SOUTHWESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 1.2 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 70.4 MILES.

# **Enduring Resources, LLC**

**Buck Camp 11-22-24-36  
660' FSL – 1,982' FWL  
SESW Sec. 36-T11S-R22E  
Uintah County, Utah**

**Lease #: ML-47077**

## **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

### **1. Existing Roads:**

Directions to the Buck Camp 11-22-24-36 Well:

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 11.2 MILES ALONG THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHEASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 6.0 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #11-22-21-36 & 11-22-22D-36 TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY, THEN SOUTHEASTERLY, THEN SOUTHWESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 1.2 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 70.4 MILES.

### **2. Planned Access Roads:**

The proposed access road will be approximately 1.2 miles of new construction all on-lease. No off-lease new construction is needed.

\*However if this well is drilled prior to the Buck Camp 11-22-21-36, then an additional 0.6 mile of new construction of new access road will also be needed.

ALL NEW CONSTRUCTION IS ON SITLA LANDS.

\*The balance of the access road is built from the county road, across State to the Enduring Buck Camp 11-22-21-36 Well located in the NENW of Section 36, 11S-22E. County Road (Seep Ridge road) (Class D Road) will be improved, if needed, to meet Uintah County, SITLA (and DOG&M) requirements, however no improvement is anticipated.

No off-lease access road right-of-way is needed.

The proposed access road will be utilized to transport personnel, equipment and supplies to and from the proposed well site during drilling, completion and production operations. The road will be utilized year round.

The access road will be crowned 2% to 3%, ditched and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet right-of-way. Maximum grade of road is 5% or less. Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. No fence crossings, culverts, turnouts, cattle guards or major cuts and fills are required. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Surface disturbance and vehicular traffic will be limited to the proposed location and proposed access route. Any additional area needed will be approved in advance. All construction shall be in conformance with the standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. 1989.

The road surface and shoulders will be kept in a safe usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear and free flowing and will be maintained according to original construction standards. The access road surface will be kept free of trash during operations. All traffic will be confined to the approved disturbed surface. Road drainage crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the road bed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided. When snow is removed from the road during the winter months, the snow shall be pushed outside of the borrow ditches and the turnouts kept clear so that snowmelt will be channeled away from the road.

3. **Location of Existing Wells within a One-Mile radius (See "Topo" Map "C" attached):**

The following wells are wells located within a one (1) mile or greater radius of the proposed location.

- a. None: Water Wells:
- b. None: Injection Wells:
- c. (3): Producing Wells:
  - i. Buck Camp 4-36 nka 11-22-11-36
  - ii. Buck Camp 2-2 nka 12-22-31-2, and
  - ii. Buck Camp 7-2 nka 12-22-32-2
- d. None: Drilling Wells:
- e. None: Shut-in Wells:
- f. None: Temporarily Abandoned Wells:
- g. None: Disposal Wells:
- h. None: Abandoned Wells:
- i. None: Dry Holes:
- j. None: Observation Wells:
- k. Various: Pending (staked) Wells:
  - i. Various wells staked by Enduring in Sec. 36-11S-22E

4. **Location of Existing and/or Proposed Facilities:**

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e. production tanks, produced water tanks and/or heater treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank and be independent of the back cut.

All permanent (on site for six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the rocky Mountain Five State Inter-Agency Committee

All facilities will be painted within 6 months of installation. The color shall be Dark Olive Black. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Gas Gathering Pipeline for this well will be:

6,400' 3" Surface Pipeline	On-Lease	SITLA
-0-	Off-Lease	N/A

A 3" surface pipeline will be constructed along the well access road from the well to the Buck Camp 11-22-21-36 pipeline.

**\*\*However if this well is drilled first than an additional 4" surface pipeline shall be laid 0.6 miles to the tie-in at the Buck Camp 4-36 pipeline which has now been completed.**

The proposed pipeline will tie-in to a 4" steel surface pipeline that is being ***\*\*proposed from the Buck Camp 11-22-21-36 gathering line.***

The meter run will be housed. The gas gathering line will be buried or anchored down from the wellhead to the meter.

Upon plugging and abandonment, the gas gathering line will be removed and the disturbed area will be re-contoured and restored as near as practical to the original condition. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

**5. Location and Type of Water Supply:**

***\*Whenever feasible, water for drilling shall be acquired from Enduring Water User Claim 49-2215, Application #T76132, or Enduring Water User Claim 49-2216, Application #T76180., or if theses sources are not feasible, then by Target Trucking Water User Claim #43-2195, or by Dalbo Inc. Water User Claim #43-8496.***

***\*Place of Use (Entire Townships):***

T10S-R22E  
***T11S-R22E***

T10S-R23E  
T11S-R23E

T10S-R22E  
T11S-R22E

Water will be hauled to the location over the roads marked on "Topo" Maps "A" and "B."

No water well is to be drilled on this lease.

**6 Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized fro location and access road construction.

Any gravel will be obtained from a commercial source; however, gravel sized rock debris associated with location and access road construction may be used as access road surfacing material.

**7. Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break or allow discharge of liquids.

The reserve pit will be lined with ¼ felt and a minimum of 16 mm plastic with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the will be disposed of in the pit.

A chemical portable toilet will be furnished with the drilling rig. The toilet will be replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

Garbage, trash and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported or disposed of in association with the drilling, completion or testing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported or disposed of in association with the drilling, completion or testing of this well.

Produced oil will be stored in an oil tank and then hauled by truck to a crude purchaser facility. Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to an approved disposal site.

## **8. Ancillary Facilities:**

During drilling operations, approximately 20 days, the site will be a manned camp. Three or four additional trailers will be on location to serve as the crews' housing and eating facilities. These will be located on the perimeter of the pad site within the topsoil stockpiles. Refer to Sheet 4.

**9. Well Site Layout: (Refer to Sheets #2, #3, and #4)**

The attached Location Layout Diagrams described drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s) and surface material stockpiles(s).

Please see the attached diagram for rig orientation and access roads.

The top soil will be windrowed rather than piled. It will be reseeded and track walker at the time the location is constructed. Seeding will be with the determined during the onsite. (Refer to "Seed Mixture for Windrowed Top Soil Will included:" following herein. The top soil removed from the pit area will be store separately and will not be reseeded until the pit is reclaimed.

All pits shall be fence to the following minimum standards:

- a. 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- b. The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches over the new wire. Total height of the fence shall be at least 42 inches.
- c. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- d. Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two fence posts shall be no greater than 16 feet.
- e. All wire shall be stretched by, using a stretching device, before it is attached to corner posts.
- f. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.
- g. Location size may change prior to drilling the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling, the location will be re-surveyed and a Form 9 will be submitted.

**10. Plans for Surface Reclamation:****Producing Location:**

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, materials, trash and debris not required for production.
- b. Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 40CFR 3162.7.
- c. Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

- d. The reserve pit and that portion of the location not needed for production facilities/operations will be re-contoured to the approximated natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.
- e. To prevent surface water(s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface 3 feet above surrounding round surface to allow the reclaimed pit area to drain effectively.
- f. Upon completion of back filling, leveling and re-contouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

**Dry Hole/Abandoned Location:**

- i. Abandoned well sites, roads and other disturbed areas will be restored as nearly as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions and re-establishment of vegetation as specified.
- ii. All disturbed surfaces will be re-contoured to the approximated natural contours with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

**Seed Mixture for Windrowed Top Soil Will Included:**

To be provided by the SITLA.

**11. Surface Ownership: Location, Access and Pipeline Route:**

Wellsite: SITLA

Access: SITLA

Pipeline: SITLA

**12. Other Information****On-site Inspection for Location, Access and Pipeline Route:**

The on-site will be scheduled by SITLA and DOG&M.

**Special Conditions of Approval:**

- Tanks and Production Equipment shall be painted Dark Olive Black.

**Archeology:**

A Cultural Resource Inventory Report is pending and to be prepared by Montgomery Archaeological Consultants.



**Paleontology:**

A Paleontology Reconnaissance Report is pending and to be prepared by Intermountain Paleo-Consulting.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the Antiquities Act of June 8, 1906) are discovered, all operations which would affect such sites will be suspended and the discovery reported promptly to the surface management agency.

**13, Lessee's or Operator's Representatives:****Representatives:**

Alvin R. (Al) Arlian  
Landman – Regulatory Specialist  
Enduring Resources, LLC  
475 17<sup>th</sup> Street, Suite 1500  
Denver, Colorado 80202  
Office Tel: 303-350-5114  
Fax Tel: 303-573-0461  
[aarlian@enduringresources.com](mailto:aarlian@enduringresources.com)

Frank Hutto  
Vice President – Operations  
Enduring Resources, LLC  
475 17<sup>th</sup> Street, Suite 1500  
Denver, Colorado 80202  
Office Tel: 303-573-5102  
Fax Tel: 303-573-0461  
[fhutto@enduringresources.com](mailto:fhutto@enduringresources.com)

# ENDURING RESOURCES, LLC.

BUCK CAMP #11-22-24-36

LOCATED IN UINTAH COUNTY, UTAH

SECTION 36, T11S, R22E, S.L.B.&M.

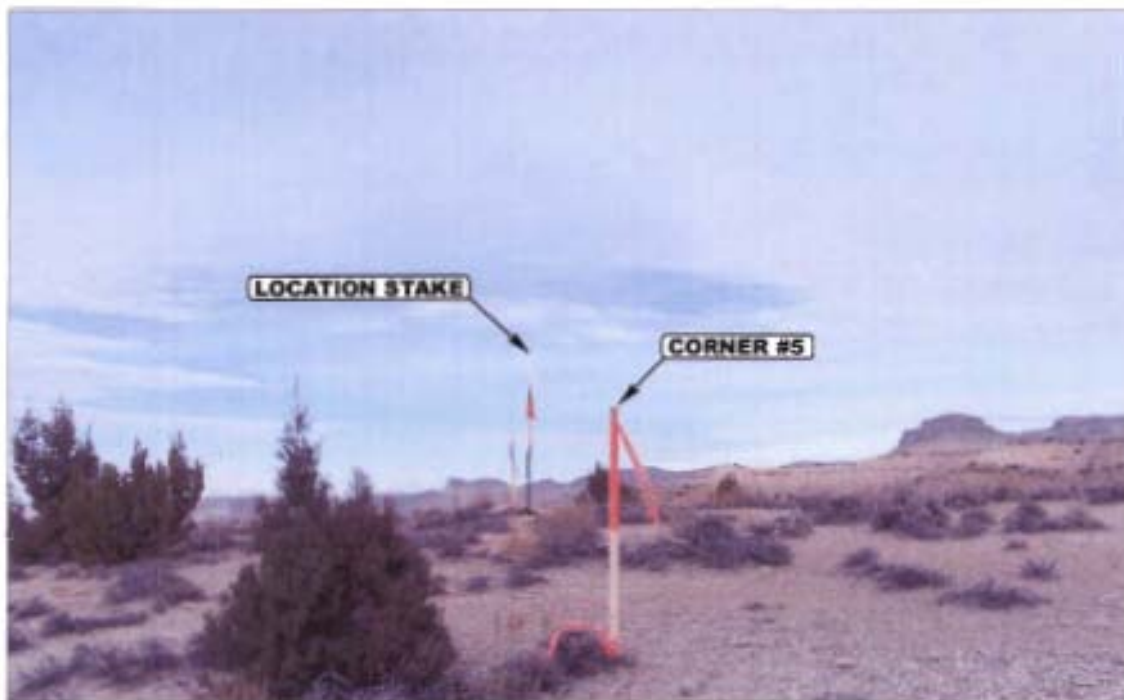


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHEASTERLY



- Since 1964 -

**UELS**

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

01 03 06  
MONTH DAY YEAR

PHOTO

TAKEN BY: T.A.

DRAWN BY: C.H.

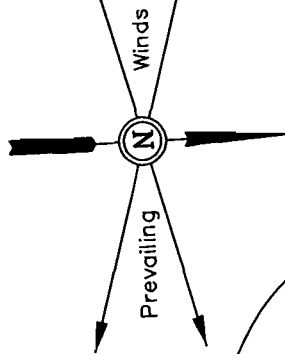
REVISED: 00-00-00

# ENDURING RESOURCES, LLC.

## LOCATION LAYOUT FOR

BUCK CAMP #11-22-24-36  
SECTION 36, T11S, R22E, S.L.B.&M.  
660' FSL 1982' FWL

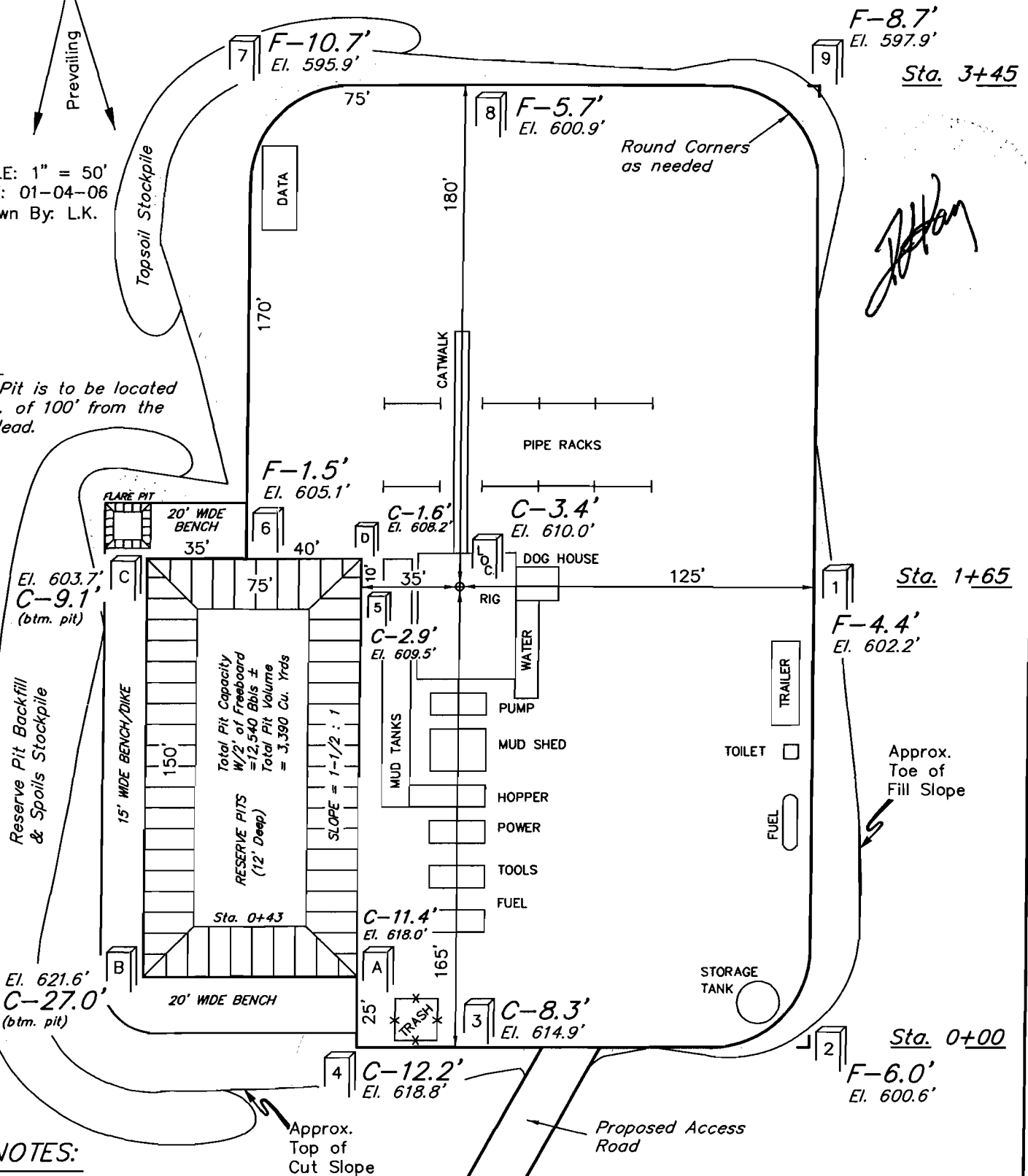
FIGURE #1



SCALE: 1" = 50'  
DATE: 01-04-06  
Drawn By: L.K.

### NOTE:

Flare Pit is to be located  
a min. of 100' from the  
Well Head.



### NOTES:

Elev. Ungraded Ground At Loc. Stake = 5610.0'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5606.6'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# ENDURING RESOURCES, LLC.

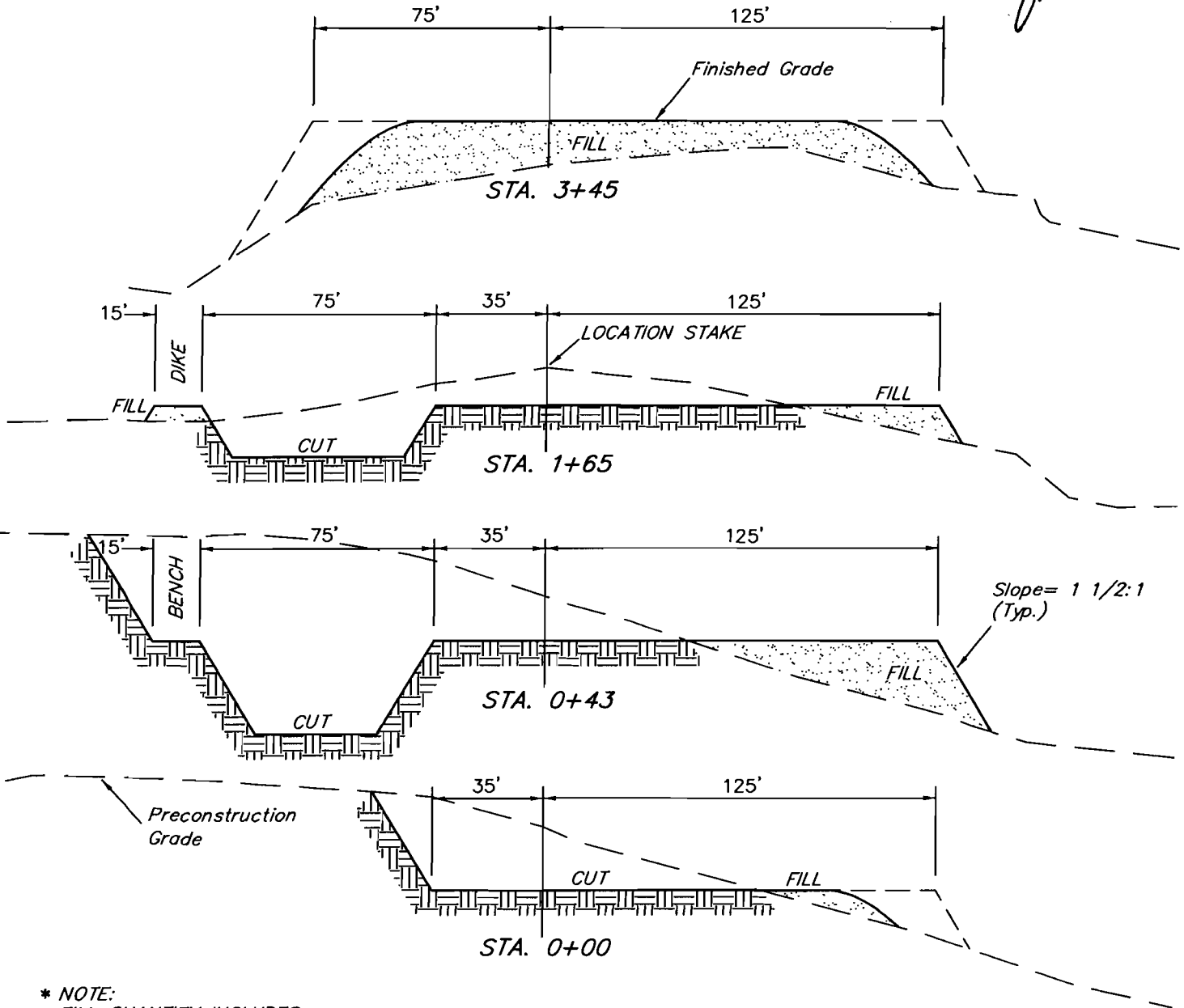
FIGURE #2

## TYPICAL CROSS SECTIONS FOR

BUCK CAMP #11-22-24-36  
SECTION 36, T11S, R22E, S.L.B.&M.  
660' FSL 1982' FWL

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 01-04-06  
Drawn By: L.K.



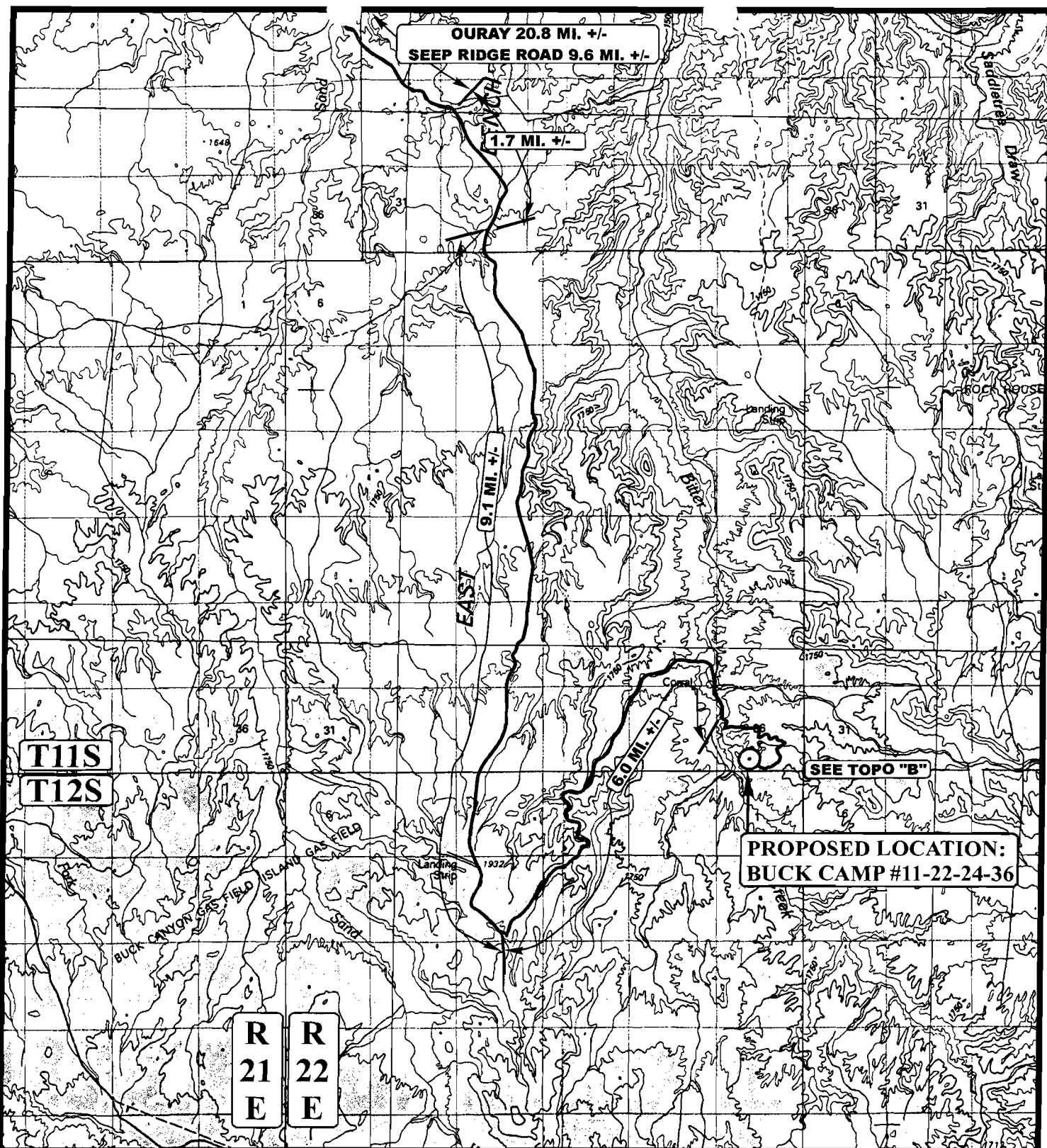
\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

### APPROXIMATE YARDAGES

CUT  
(6") Topsoil Stripping = 1,780 Cu. Yds.  
Remaining Location = 10,840 Cu. Yds.  
  
TOTAL CUT = 12,620 CU.YDS.  
FILL = 9,140 CU.YDS.

EXCESS MATERIAL = 3,480 Cu. Yds.  
Topsoil & Pit Backfill  
(1/2 Pit Vol.) = 3,480 Cu. Yds.  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Rehabilitation)

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# **LEGEND:**

○ PROPOSED LOCATION

# **ENDURING RESOURCES, LLC.**

BUCK CAMP #11-22-24-36  
SECTION 36, T11S, R22E, S.L.B.&M.  
660' FSL 1982' FWL



Uintah Engineering & Land Surveying  
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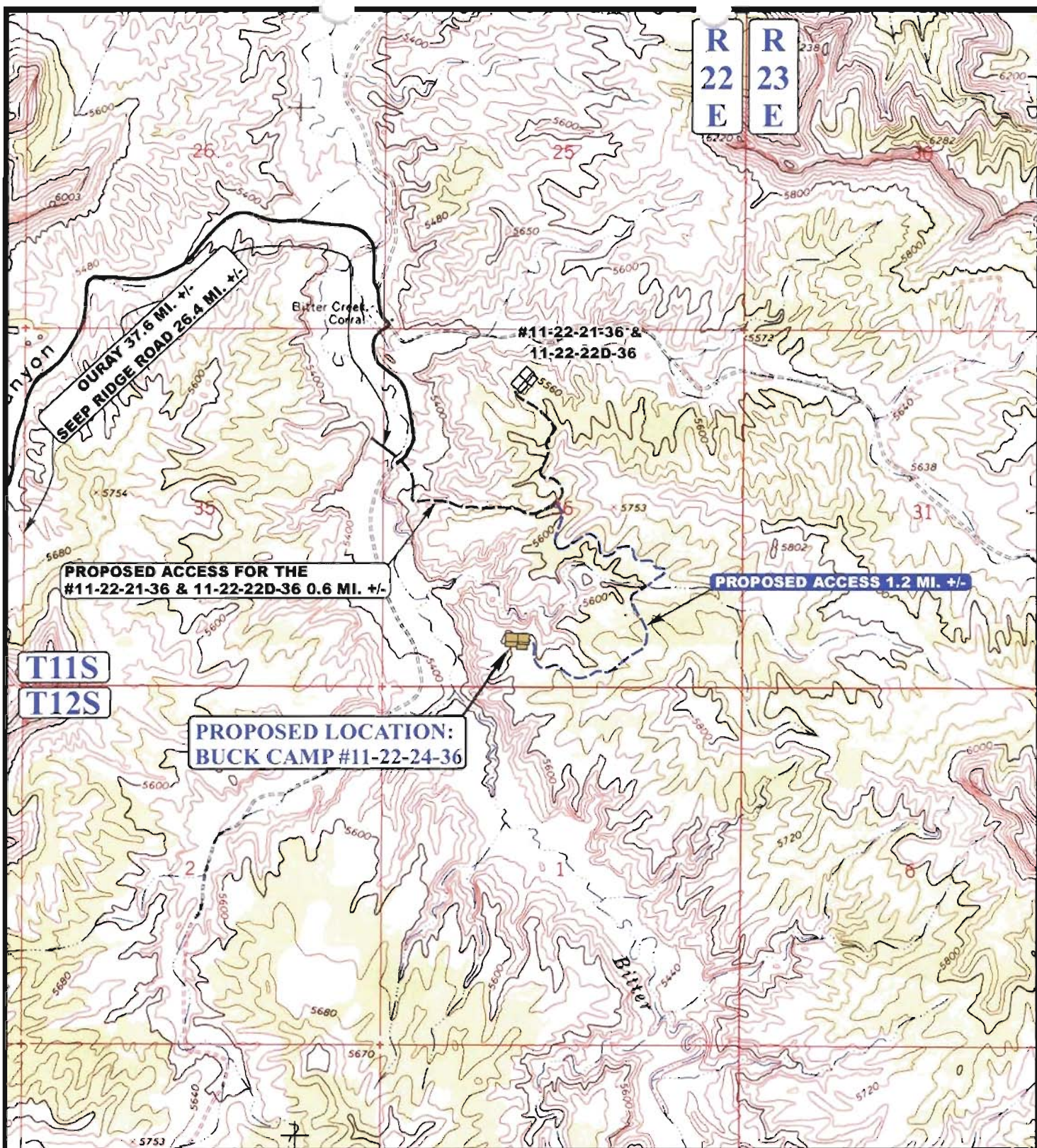
TOPOGRAPHIC  
MAP

01 03 06  
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: C.H. REVISED: 00-00-00







# **LEGEND:**

———— EXISTING ROAD  
 - - - - - PROPOSED ROAD

# **ENDURING RESOURCES, LLC.**

**BUCK CAMP #11-22-24-36**  
**SECTION 36, T11S, R22E, S.L.B.&M.**  
**660' FSL 1982' FWL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



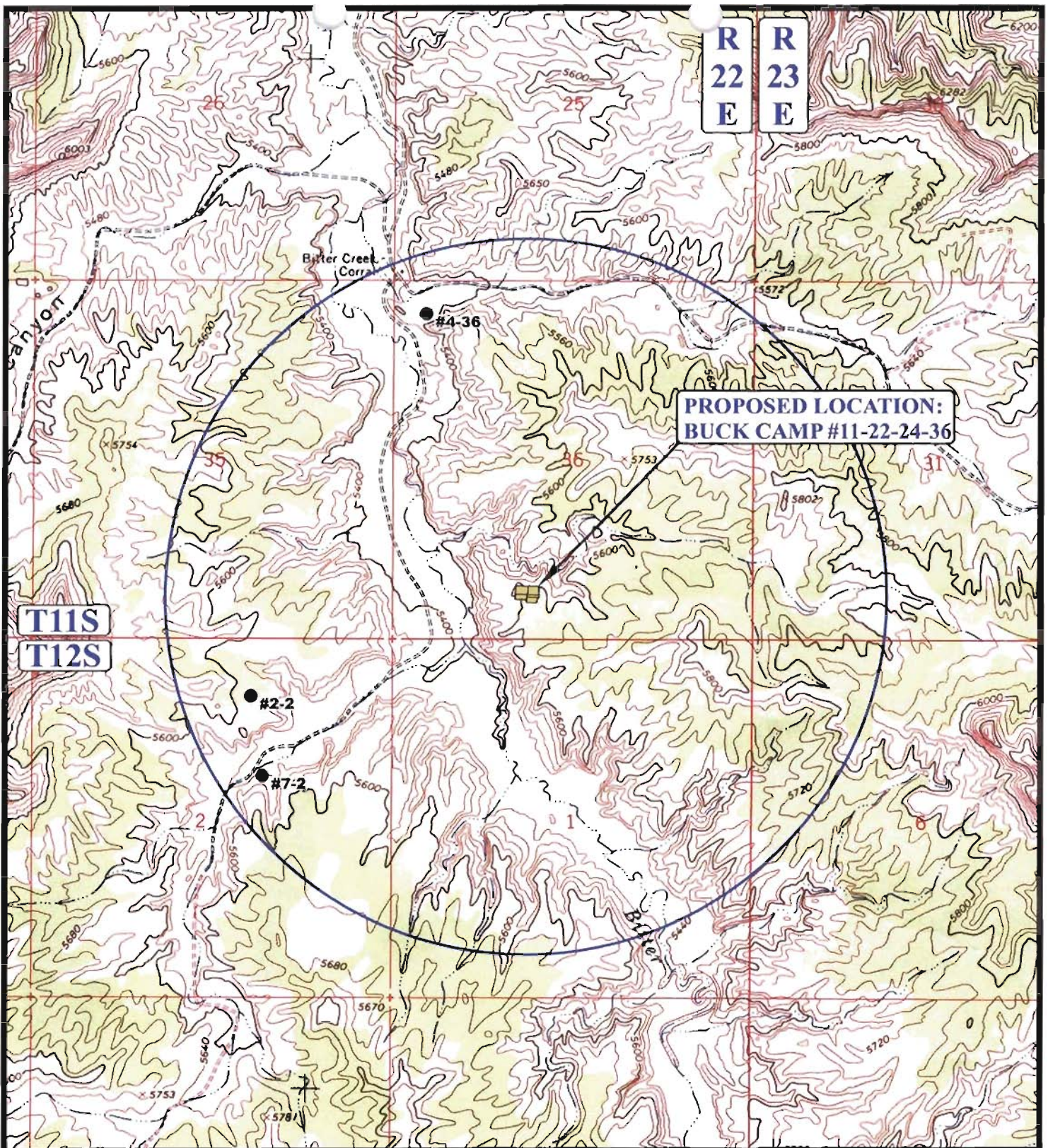
**TOPOGRAPHIC**  
**MAP**

**01 03 06**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.H. REVISED: 00-00-00







### LEGEND:

- |                   |                         |
|-------------------|-------------------------|
| ○ DISPOSAL WELLS  | ○ WATER WELLS           |
| ● PRODUCING WELLS | ● ABANDONED WELLS       |
| ● SHUT IN WELLS   | ● TEMPORARILY ABANDONED |



### ENDURING RESROUCES, LLC.

**BUCK CAMP #11-22-24-36**  
**SECTION 36, T11S, R22E, S.L.B.&M.**  
**660' FSL 1982' FWL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

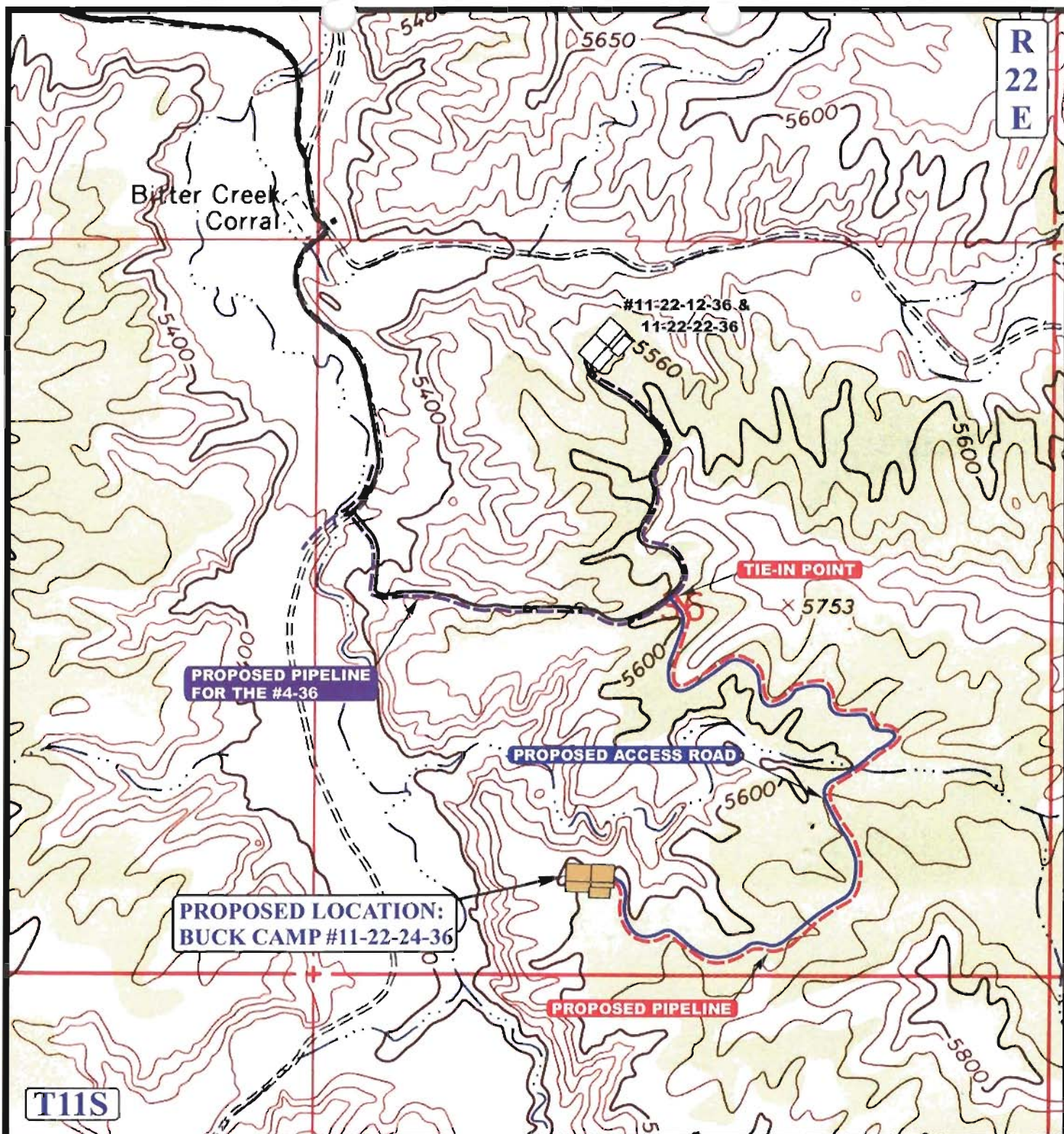
**TOPOGRAPHIC  
MAP**

**01 03 06**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.H. REVISED: 00-00-00







**APPROXIMATE TOTAL PIPELINE DISTANCE = 6400' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- - - EXISTING PIPELINE
- - - PROPOSED PIPELINE
- - - PROPOSED PIPELINE (SERVICING OTHER WELLS)

**N**

**ENDURING RESOURCES, LLC.**

**BUCK CAMP #11-22-24-36**

**SECTION 36, T11S, R22E, S.L.B.&M.**

**660' FSL 1982' FWL**



**Utah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

**01 03 06**  
MONTH DAY YEAR

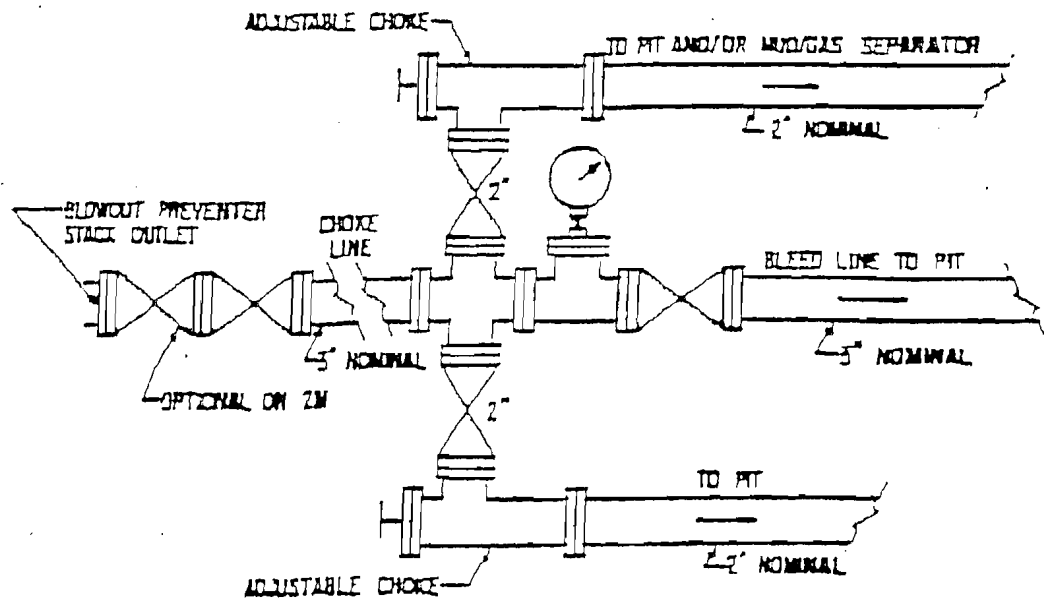
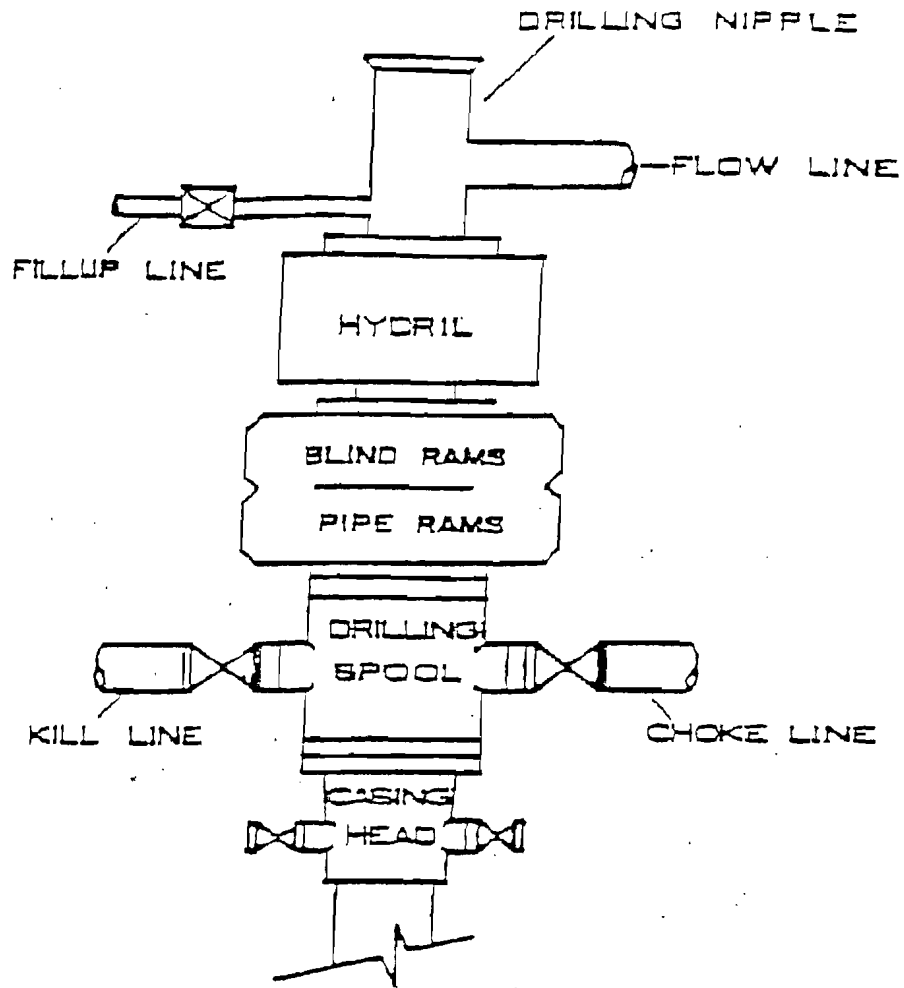
SCALE: 1" = 1000' DRAWN BY: C.H. REVISED: 00-00-00

**D  
TOPO**



3,000 PSI

## EOP STACK



**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 03/02/2006

API NO. ASSIGNED: 43-047-37866

WELL NAME: BUCK CAMP 11-22-24-36

OPERATOR: ENDURING RESOURCES, LLC ( N2750 )

CONTACT: AL ARLIAN

PHONE NUMBER: 303-350-5114

**PROPOSED LOCATION:**

SESW 36 110S 220E

SURFACE: 0660 FSL 1982 FWL

BOTTOM: 0660 FSL 1892 FWL

COUNTY: UINTAH

LATITUDE: 39.81168 LONGITUDE: -109.4052

UTM SURF EASTINGS: 636510 NORTHINGS: 4407862

FIELD NAME: UNDESIGNATED ( 2 )

INSPECT LOCATN BY: / /

**Tech Review**

**Initials**

**Date**

Engineering

DGD

4/25/06

Geology

Surface

LEASE TYPE: 3 - State

LEASE NUMBER: ML-47077

SURFACE OWNER: 3 - State

PROPOSED FORMATION: MVRD

COALBED METHANE WELL? NO

**RECEIVED AND/OR REVIEWED:**

☒ Plat

☒ Bond: Fed[] Ind[] Sta[] Fee[]

(No. RUB0008031)

☒ Potash (Y/N)

☒ Oil Shale 190-5 (B) or 190-3 or 190-13

☒ Water Permit

(No. 43-8496)

☒ RDCC Review (Y/N)

(Date: \_\_\_\_\_)

☒ Fee Surf Agreement (Y/N)

☒ Intent to Commingle (Y/N)

**LOCATION AND SITING:**

R649-2-3.

Unit: \_\_\_\_\_

☒ R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

☒ R649-3-3. Exception

☒ Drilling Unit

Board Cause No: \_\_\_\_\_

Eff Date: \_\_\_\_\_

Siting: \_\_\_\_\_

☒ R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_

Need Permit (04-05-06)

STIPULATIONS: \_\_\_\_\_

1- Spacing Strip

2- STATEMENT OF BASIS

3- Surface Log Cont Strip

T11S R22E

T11S R23E

ROCK HOUSE FIELD

BUCK CAMP  
11-22-11-36

BUCK CAMP 11-22-21-36  
BUCK CAMP 11-22-22-36

BUCK CAMP  
11-22-22-36

36

BUCK CAMP  
11-22-13-36

BUCK CAMP  
11-22-14-36

BUCK CAMP  
11-22-24-36

T12S R22E

T12S R23E

BUCK CAMP  
12-22-41-2

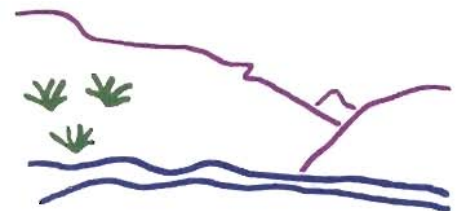
OPERATOR: ENDURING RES LLC (N2750)

SEC: 36 T. 11S R. 22E

FIELD: UNDESIGNATED (002)

COUNTY: UTAH

SPACING: R649-3-2 / GENERAL SITING



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY  
DATE: 06-MARCH-2006

**Field Status**  
 [Black Box] ABANDONED  
 [Pink Box] ACTIVE  
 [Purple Box] COMBINED  
 [Light Blue Box] INACTIVE  
 [Dark Blue Box] PROPOSED  
 [Light Green Box] STORAGE  
 [White Box] TERMINATED

**Unit Status**  
 [Green Box] EXPLORATORY  
 [Light Green Box] GAS STORAGE  
 [Light Blue Box] NF PP OIL  
 [Light Blue Box] NF SECONDARY  
 [Light Blue Box] PENDING  
 [Green Box] PI OIL  
 [Red Box] PP GAS  
 [Red Box] PP GEOTHERML  
 [Red Box] PP OIL  
 [Green Box] SECONDARY  
 [White Box] TERMINATED

**Wells Status**  
 [Star] GAS INJECTION  
 [X] GAS STORAGE  
 [X] LOCATION ABANDONED  
 [Circle] NEW LOCATION  
 [Diamond] PLUGGED & ABANDONED  
 [Star] PRODUCING GAS  
 [Star] PRODUCING OIL  
 [Star] SHUT-IN GAS  
 [Star] SHUT-IN OIL  
 [X] TEMP. ABANDONED  
 [Circle] TEST WELL  
 [Triangle] WATER INJECTION  
 [Triangle] WATER SUPPLY  
 [Triangle] WATER DISPOSAL  
 [Triangle] DRILLING

**DIVISION OF OIL, GAS AND MINING  
APPLICATION FOR PERMIT TO DRILL  
STATEMENT OF BASIS**

**OPERATOR:** ENDURING RESOURCES, LLC  
**WELL NAME & NUMBER:** Buck Camp 11-22-24-36  
**API NUMBER:** 43-047-37866  
**LOCATION:** 1/4,1/4 SE/SW Sec: 36 TWP: 11S RNG: 22E 660' FSL 1982 FWL

**Geology/Ground Water:**

Enduring proposes to set 2,000 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 3,100 feet. A search of Division of Water Rights records shows 1 water well within a 10,000 foot radius of the proposed location. The well is approximately .5 miles from the proposed location. The well is owned by the BLM and no depth is listed. The surface formation at this location is the Uinta/Green River Formation transition. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. The Green River Formation is made up of interbedded limestones, shales and sandstones. Fresh water aquifers can be found in the Green River Formation and should be protected. The proposed surface casing should adequately protect any potentially useable aquifers.

**Reviewer:** Brad Hill **Date:** 04-17-06

**Surface:**

The pre-drill investigation of the surface was performed on 04/05/2006. The State of Utah (SITLA) owns both the surface and minerals of this location. Mr. Ed Bonner and Jim Davis of SITLA and Ben Williams of the Utah Division of Wildlife Resources were invited to the pre-site. Mr. Davis and Mr. Williams both attended. Approximately 0.2 mile of new access road will be constructed to reach the location leading off an access road, which is planned for other wells in the area. Ben Williams representing the UDWR stated the area is classified as critical value winter habitat for deer and high value winter elk habitat. He explained how the areas are classified and recommended to Mr. Hammond and Mr. Davis that activity be limited from Nov. 15 thru March 15 to protect wintering values for deer. This activity would include road and pad construction, drilling and work-over rigs. He furnished a copy of his recommendations to SITLA and Mr. Hammond along with a recommended seed mix to be used to re-vegetate the area. The selected location appears to be the best site for constructing a pad and drilling and operating a well in the immediate area. No significant stability problems are anticipated.

**Reviewer:** Floyd Bartlett **Date:** 04/06/2006

**Conditions of Approval/Application for Permit to Drill:**

1. A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.

**ON-SITE PREDRILL EVALUATION**  
**Division of Oil, Gas and Mining**

**OPERATOR:** ENDURING RESOURCES, LLC  
**WELL NAME & NUMBER:** Buck Camp 11-22-24-36  
**API NUMBER:** 43-047-37866  
**LEASE:** ML-47077 **FIELD/UNIT:** Undesignated  
**LOCATION:** 1/4,1/4 SE/SW Sec: 36 TWP: 11S RNG: 22E 660' FSL 1982 FWL  
**LEGAL WELL SITING:** 460 F SEC. LINE; 460 F 1/4,1/4 LINE; 920 F ANOTHER WELL.  
**GPS COORD (UTM):** 636510 E 4407862 N **SURFACE OWNER:** State of Utah-SITLA

**PARTICIPANTS**

Floyd Bartlett (DOGM), Douglas Hammond (Enduring Resources), Larry Rowell and Mike Stewart (Ponderosa Construction), Brandon Bowthorpe and Matt Cook (Uintah Engineering and Land Surveying), Jim Davis (SITLA), Ben Williams (Utah Division of Wildlife Resources,

**REGIONAL/LOCAL SETTING & TOPOGRAPHY**

The proposed Buck Camp 11-22-24-36 well lies on the top of a lateral ridge, which slopes slightly to the west toward Bitter Creek. This lateral ridge is west of the main north-south ridge on the east side of Bitter Creek. It is surrounded on the west and north by high plateaus with steep side slopes topped by cliff forming bedrock. The ridge will be flattened to form the location. No drainage intersect the site.

The bottom of Bitter Creek is approximately 3/8 mile to the west of the proposed location. This portion of Bitter Creek is an ephemeral drainage only flowing during spring runoff and intense summer rainstorms. The White River is approximately 10 miles downstream to the north.

The location is approximately 22 miles south west of Bonanza Ut, and approximately 70 miles southwest of Vernal, UT. Access from Ouray, UT is by State Highway then Uintah County roads 38 miles to the Biter Creek Corrals. Then following a oil field development road south about 1/2 mile up the bottom of Bitter Creek to where a new road is planned to several wells on this ridge. From this road approximately 1.2 miles of road is planned to this location.

Topography in the general area is broad canyon bottoms separated by steep and often ledgy side-slopes, which top out onto broad ridge tops. Frequent outwash plains and deposits occur along the sides of the major bottoms. Bitter Creek is a broad somewhat gentle alluvial wash, which is dry except for spring runoff and sometimes-intense summer rainstorms.

**SURFACE USE PLAN**

CURRENT SURFACE USE: wildlife and domestic sheep grazing and hunting.

PROPOSED SURFACE DISTURBANCE: Approximately 1.2 miles of new access road and construction of a well location 345'x 200' plus a reserve pit and

soil stockpile storage outside the described area.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: Several wells are planned within or are being drilled within this radius. See attached map from GIS database.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production facilities will be on location and added after drilling well. Approximately 1420 feet of pipeline will be laid overland south and west to a tie in point in the bottom of Bitter Creek.

SOURCE OF CONSTRUCTION MATERIAL: All construction material will be borrowed from site during construction of location.

ANCILLARY FACILITIES: None will be required.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? EXPLAIN: Unlikely. Oilfield activity is common in the area.

#### **WASTE MANAGEMENT PLAN:**

Drilled cuttings will be settled into reserve pit. Liquids from pit will be allowed to evaporate. Formation water will be confined to storage tanks. Commercial contractor will handle sewage facilities, storage and disposal. Trash will be contained in trash baskets and hauled to an approved land fill.

#### **ENVIRONMENTAL PARAMETERS**

AFFECTED FLOODPLAINS AND/OR WETLANDS: None.

FLORA/FAUNA: Poorly vegetated pinion-juniper site with some black sagebrush under-story and in the openings. Pronghorn, rodents, songbirds, raptors, elk, deer, bobcat, coyote, heavy winter sheep grazing..

SOIL TYPE AND CHARACTERISTICS: Shallow, shaley, sandy loam with no surface bedrock outcrops.

EROSION/SEDIMENTATION/STABILITY: Light natural erosion is occurring on the site. No drainages will be intercepted by the proposed. No stability problems are anticipated with the construction and operation of the location.

PALEONTOLOGICAL POTENTIAL: none observed.

#### **RESERVE PIT**

CHARACTERISTICS: 150' by 75' and 12' deep. The reserve pit is planned primarily within an area of cut on the south east corner of the location. No stabilization problems are expected.

LINER REQUIREMENTS (Site Ranking Form attached): A liner will be required for reserve pit. Sensitivity score is 30 and a rating Level II.

## **SURFACE RESTORATION/RECLAMATION PLAN**

As per landowner agreement with SITLA.

SURFACE AGREEMENT: SITLA

CULTURAL RESOURCES/ARCHAEOLOGY: A survey was completed by MOAC on 2/17/06 and will be forwarded to SITLA.

### **OTHER OBSERVATIONS/COMMENTS**

Both the surface and minerals of this location are owned by SITLA.

Ben Williams representing the UDWR stated the area is classified as critical value winter habitat for deer and high value winter elk habitat. He explained how the areas are classified and recommended to Mr. Hammond they limit their activity from Nov. 15 thru March 15 to protect wintering values for deer. This activity would include road and pad construction, drilling and work-over rigs.

Jim Davis of SITLA had no concerns regarding the access to and the drilling of a well at this location. The selected location appears to be the best site for drilling and operating a well in the immediate area.

This pre-drill investigation was conducted on a cold very windy day. Four wheeled ATV's were used to access the site.

### **ATTACHMENTS**

Photos of site have been taken and placed on file.

Floyd Bartlett  
DOGM REPRESENTATIVE

04/05/2005 11:10 AM  
DATE/TIME

**Valuation Ranking Criteria and Ranking Score  
For Reserve and Onsite Pit Liner Requirements**

<u>Site-Specific Factors</u>	<u>Ranking</u>	<u>Site Ranking</u>
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	<u>0</u>
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	<u>0</u>
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	<u>10</u>
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	<u>10</u>
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid	15	
containing significant levels of hazardous constituents	20	<u>5</u>
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	<u>0</u>
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	<u>5</u>
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	<u>0</u>
Presence of Nearby Utility Conduits		
Not Present	0	
Unknown	10	
Present	15	<u>0</u>

**Final Score**      30      (Level II Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.

Sensitivity Level II = 15-19; lining is discretionary.

Sensitivity Level III = below 15; no specific lining is required.



# 4-06 Enduring Buck Camp 1. 22-24-36

## Casing Schematic

Uista

Surface

8-5/8"  
MW 8.4  
Frac 19.3

TOC @  
0.  
279 Green River

1184 Toe Tail

TOC @  
1673.

Surface  
2000. MD

✓ w/ 4% washout  
A. S. Frac 19.3 St. P

BHP

$$(.052)(7260)(9.8) = 3699$$

Anticipate 3775

2417 Toe Tail

2829 Washout

Gas

$$(.12)(7260) = 871$$

(MAHP = 2904)

✓ w/ 8% washout

BoRE - 3,000 ✓

4919 Mesaverde

Surf Csg - 2950

(70% = 2065)

Mat pressure @ Surf Csg shoe = 2618

Test TO 2065# ✓  
(1200 psi surface press.)

Ad (interior) 4/25/00  
4-1/2"  
MW 9.8

Production  
7260. MD

Well name:	<b>04-06 Enduring Buck Camp 11-22-24-36</b>	
Operator:	<b>Enduring Resources LLC</b>	Project ID:
String type:	Surface	43-047-37866
Location:	Uintah County	

**Design parameters:**
**Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 93 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 250 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 1,760 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,000 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on buoyed weight.  
Neutral point: 1,747 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 7,260 ft  
Next mud weight: 9.800 ppg  
Next setting BHP: 3,696 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 2,000 ft  
Injection pressure 2,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2000	8.625	24.00	J-55	ST&C	2000	2000	7.972	96.3

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	873	1370	1.570	2000	2950	1.48	42	244	5.82 J

Prepared Clinton Dworshak  
by: Utah Div. of Oil & Mining

Phone: 801-538-5280  
FAX: 810-359-3940

Date: April 18, 2006  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>04-06 Enduring Buck Camp 11-22-24-36</b>		
Operator:	<b>Enduring Resources LLC</b>		
String type:	Production	Project ID:	43-047-37866
Location:	Uintah County		

**Design parameters:**
**Collapse**

Mud weight: 9.800 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 167 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top: 1,673 ft

**Burst**

Max anticipated surface pressure: 2,825 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 3,696 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Non-directional string.

Tension is based on buoyed weight.

Neutral point: 6,196 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	7260	4.5	11.60	N-80	LT&C	7260	7260	3.875	168.3

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	3696	6350	1.718	3696	7780	2.10	72	223	3.10 J

Prepared Clinton Dworshak  
by: Utah Div. of Oil & Mining

Phone: 801-538-5280  
FAX: 810-359-3940

Date: April 18, 2006  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 7260 ft, a mud weight of 9.8 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

May 8, 2006

Enduring Resources, LLC  
475 17th St., Ste. 1500  
Denver, CO 80202

Re: Buck Camp 11-22-24-36 Well, 660' FSL, 1982' FWL, SE SW, Sec. 36,  
T. 11 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-37866.

Sincerely,

A handwritten signature in black ink, appearing to read "Gil Hunt".

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
SITLA

**Operator:** Enduring Resources, LLC  
**Well Name & Number** Buck Camp 11-22-24-36  
**API Number:** 43-047-37866  
**Lease:** ML-47077

**Location:** SE SW                      **Sec.** 36                      **T.** 11 South                      **R.** 22 East

### **Conditions of Approval**

**1. General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

**2. Notification Requirements**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

**3. Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.**

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
6. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
7. Surface casing shall be cemented to the surface.

## FORM 3

AMENDED REPORT ☐  
(highlight changes)

APPLICATION FOR PERMIT TO DRILL				5. MINERAL LEASE NO: ML-47077	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>				8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: Enduring Resources, LLC				9. WELL NAME and NUMBER: Buck Camp 11-22-24-36	
3. ADDRESS OF OPERATOR: 475 17th St., Ste 1500 CITY Denver STATE CO ZIP 80220			PHONE NUMBER: (303) 350-5114	10. FIELD AND POOL, OR WILDCAT: Undesignated	
4. LOCATION OF WELL (FOOTAGES)  AT SURFACE: 660' FSL - 1,982' FWL AT PROPOSED PRODUCING ZONE: SAME				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 36 11S 22E S	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 70.4 miles southeast of Vernal, Utah				12. COUNTY: Uintah	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 660'	16. NUMBER OF ACRES IN LEASE: 640		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40 acres		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 1500' +	19. PROPOSED DEPTH: 7,260		20. BOND DESCRIPTION: RLB0008031		
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5623' KB-RT	22. APPROXIMATE DATE WORK WILL START: 6/1/2006		23. ESTIMATED DURATION: 20 days		

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
20"	14" line pipe	40	3 yards	Ready Mix		
11"	8-5/8" J-55 24#	2,000	Premium Lead	138 sxs	3.50	11.1
			Premium Tail	138 sxs	1.15	15.8
7-7/8"	4-1/2" N-80 11.6#	7,260	Class G	64 sxs	3.3	11.0
			50/50 Poz Class G	882 sxs	1.56	14.3

## ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Alvin R. (Al) Arlian

TITLE Landman - Regulatory Specialist

SIGNATURE

DATE 2/28/2006

**(This space for State use only)**

API NUMBER ASSIGNED:

43-047-37846

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

**Date:** 05-06  
(See Instructions on Reverse Side)

**Dr:**

(11/2001)

RECEIVED  
MAR 02 2006

DIV. OF OIL, GAS & MINING





**From:** Ed Bonner  
**To:** Whitney, Diana  
**Date:** 5/8/2006 12:36:16 PM  
**Subject:** Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

**Enduring Resources, LLC**

Buck Camp 11-22-13-36  
Buck Camp 11-22-14-36  
Buck Camp 11-22-21-36  
Buck Camp 11-22-22-36  
Buck Camp 11-22-23-36  
Buck Camp 11-22-24-36  
Buck Camp 12-22-11-2  
Buck Camp 12-22-13-2  
Buck Camp 12-22-21-2  
Buck Camp 12-22-24-2  
Buck Camp 12-22-34-2  
Buck Camp 12-22-41-2 (1 significant site which must be avoided)  
Buck Camp 12-22-42-2  
Buck Camp 12-22-43-2  
Buck Camp 12-22-44-2

**Kerr McGee Oil & Gas Onshore LP**

NBU 922-32E  
NBU 922-32H  
NBU 922-32D  
NBU 922-32J3  
NBU 922-32O2  
NBU 922-32J1

**Westport Oil & Gas Company**

NBU 922-32N

**Tidewater Oil & Gas Company**

Tidewater State 23-1  
Tidewater State 23-2 (1 significant site which must be avoided)  
Tidewater State 23-5  
Tidewater State 32-3

If you have any questions regarding this matter please give me a call.

**CC:** Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-47077
2. NAME OF OPERATOR: Enduring Resources, LLC		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: n/a
3. ADDRESS OF OPERATOR: 475 17th Street, Suite 1500 CITY Denver STATE CO ZIP 80202		7. UNIT or CA AGREEMENT NAME: n/a
4. LOCATION OF WELL FOOTAGES AT SURFACE: 660' FSL - 1982' FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 36 11S 22E S		8. WELL NAME and NUMBER: Buck Camp 11-22-24-36
PHONE NUMBER: (303) 350-5719		9. API NUMBER: 4304737866
		10. FIELD AND POOL, OR WILDCAT: Undesignated
		COUNTY: Uintah
		STATE: UTAH

**CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: Request for APD Extension
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Enduring Resources, LLC respectfully request an extension to the expiration date of this Application for Permit to Drill ....


FROM: 5/3/2008  
TO: 5/3/2009


Approved by the  
Utah Division of  
Oil, Gas and Mining

COPY SENT TO OPERATOR

Date: 5.6.2008  
Initials: KS

Date: 05-05-08

By: 

NAME (PLEASE PRINT) Alvin R. (Al) Arlian	TITLE Landman - Regulatory Specialist
SIGNATURE 	DATE 4/30/2008

(This space for State use only)

RECEIVED  
MAY 05 2008  
DIV. OF OIL, GAS & MINING



**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4304737866  
**Well Name:** Buck Camp 11-22-24-36  
**Location:** 660' FSL - 1982' FWL, SESW, Sec 36, T11S-R22E  
**Company Permit Issued to:** Enduring Resources, LLC  
**Date Original Permit Issued:** 5/8/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☐

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒


Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

4/30/2008  
Date

Title: Landman - Regulatory Specialist

Representing: Enduring Resources, LLC

**RECEIVED**  
**MAY 05 2008**  
DIV. OF OIL, GAS & MINING



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

May 14, 2009

Enduring Resources, LLC  
475 17<sup>TH</sup> Street, Suite 1500  
Denver, CO 80202

Re: APD Rescinded – Buck Camp 11-22-24-36, Sec.36, T.11S, R.22E  
Uintah County, Utah API No. 43-047-37866

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on May 8, 2006. On May 3, 2007 and on May 5, 2008 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective May 14, 2009.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason  
Environmental Scientist

cc: Well File  
Ed Bonner, SITLA

